

## Education

- **Indian Institute of Technology, Kanpur** *2014 - 2019 (Expected)*  
Cumulative Grade Point Average 8.9/10
- **All India Senior School Certificate Examination (AISSCE)**  
Central Board of Secondary Education (CBSE), Govt. of India; Delhi Public School, R. K. Puram
  - 98.2% (School Topper) with National top 1% in Computer Science & Chemistry *2014*
  - Cumulative Grade Point Average (CGPA) 10/10 *2012*

## Academic and Co-Curricular Achievements

- Secured AIR 116 in **JEE Mains** 2014 & AIR 1306 in **JEE Advanced** 2014 amongst 1.5 million candidates
- Secured Rank 29 & 54 in **ACM-ICPC Amritapuri** Onsite & Online Round 2015 respectively amongst 1500 teams
- **Microsoft Code.Fun.Do**
  - **Winner 2014-15:** Graphing app to plot implicit 2D Mathematical Functions for Windows Phone Platform
  - **National 5<sup>th</sup>, Coding Milestone, Finalist Forum 2014-15:** Educational app for Windows Phone Platform
  - **Winner 2015-16:** Front-end for open source program simulation code for Microsoft Windows Store
- Qualified for & attended **International Olympiad of Informatics Training Camp** 2014
- **Kishore Vaigyanik Protsahan Yojna** Fellow 2013, Department of Science & Technology, Government of India
- **National Talent Search Examination** Scholar 2010, conducted by NCERT, Government of India

## Work Experience

- Development Intern, **IITK NYC Office** *MAY 2016 - current*  
*Supervisor: Prof. Manindra Agrawal, Department of CSE, IIT Kanpur*
  - Working on the backend of a scale-able web application using Scala with Akka
  - Currently working on an efficient way of implementing history for editable items in a stream of objects
- Web Developer (Intern), **Elanic**, Bangalore *DEC 2015*
  - Full stack developer: MongoDB, AngularJS and NodeJS along with Restify framework
  - Built RESTful APIs for notification, engagement(likes, comments) and search (using Elastic Search) modules

## Projects

- **PhotoProof:** Cryptographic Image Authentication JUN 2016 - current  
Supervisor: Prof. Nasir Memon, (Department Head) Department of CSE, NYU School of Engineering
  - Understood the theoretical model for image authentication based on Proof-Carrying Data (PCD)
  - Currently working on a practical implementation of the idea described in the paper using libsnark's PCD
- **Cimulator:** a Visual & Interactive Tutoring system Click here for **Tutorial** MAY - JUL 2015  
Supervisor: Prof. Amey Karkare, Department of CSE, IIT Kanpur Tested by 400 students in Fall 2015
  - Interpreter for C language in python, modelled memory artificially, handled external header files & overflows
  - Prompts user with possible corrections for runtime errors instead of crashing abruptly (unlike gcc)
  - Web interface to **simulate C codes** that were interpreted by Cimulator to provide visual cues to the user

## Relevant Courses Undertaken

- **Mathematics:**  
Mathematics I (Functional Analysis), Mathematics II (Linear Algebra), Probability & Statistics, Mathematical Logic,  
Abstract Algebra, Commutative Algebra (\*), Introduction to Fourier Series (\*), Real Analysis, Complex Analysis,  
Several Variable Calculus(\*)
- **Computer Science:**  
Fundamentals of Computing (A\*), Data Structures and Algorithms (A\*), Algorithms II (\*), Theory of Computation(\*),  
Modern Cryptology, Principles of Database Systems, Quantum Computing, Introduction to Computer Graphics
- **Others:**  
Introduction to Economics (A\*), Introduction to Philosophical Logic  
  
(A\*) Awarded for exceptional performance (\*) Courses in Progress

## Positions of Responsibility

- **Coordinator, Programming Club**, Science and Technology Council, IIT Kanpur *MAR 2016 - current*
  - Conducted several lecture series, workshops and competitions on Algorithmic Programming, Open Source Development, and Web Development for students of the campus community
  - Organised the summer camp and mentored over 60 students who completed projects in the field of Web & App Development, Augmented Reality, Machine Learning, Computer Vision and Ethical Hacking
- **Head Web, Antaragni**, Students' Gymkhana, IIT Kanpur *MAR 2016 - current*
  - Conceptualised and designed the website for Antaragni 2016 (<http://antaragni.in/>)
  - Implemented NodeJS server with Express framework, along with MongoDB & AngularJS
  - Dynamically rendered the events, contacts, sponsors page and schedule from the database